REMARKS

Claims 1-60 were presented for examination and all claims were rejected. In the current amendment, independent claims 1, 23, 31 and 53 have been amended. Support for the amended claims can be found in FIG. 3A, FIG. 3B and FIG. 3C, as well as in paragraphs [0007], [0019], [0036], [0058], [0064], [0065] and [0067]. No new matter has been introduced. Upon entry of this amendment, claims 1-60 will be pending in this application. Applicants submit that pending claims 1-60 are in condition for allowance. All stated grounds for rejection have been addressed in the following comments. Applicants respectfully request reconsideration and allowance of claims 1-60 in view of the remarks set forth below.

I. CLAIM REJECTIONS UNDER 35 U.S.C. §103

Claims 1-8, 12-16, 17-29, 31-57 and 59-60 are rejected as unpatentable over U.S. Patent No. 7,146,431 to Hipp ("Hipp") and further in view of U.S. Publication No. 2005/0198387 A1 to Willis ("Willis") under 35 U.S.C. §103. Applicants respectfully traverse this rejection. Amended claims 1, 23, 31 and 53 are independent. Claims 2-8, 12-16 and 17-22 incorporate all of the claim elements of independent claim 1, as amended. Claims 24-29 incorporate all of the claim elements of independent claim 23, as amended. Claims 32-52 incorporate all of the claimed elements of independent claim 31, as amended. Claims 54-57 and 59-60 incorporate all of the claim elements of independent claim 53, as amended. Applicants submit that neither Hipp nor Willis, alone or in combination, teach or suggest each and every element recited in the claimed invention, as amended.

A. Lack of Basis for Prima Facie Obviousness using Hipp and Willis

To establish *prima facie* obviousness of a claimed invention, there must be: a) some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, b) a reasonable expectation of success, and c) the prior art reference must teach or suggest all the claim limitations. Amended claims 1, 23, 31 and

53 are directed to systems and methods for assigning network identifiers or loopback addresses to each program invoked on a computer system. Claims 1, 23, 31 and 53 recite obtaining a plurality of network identifiers or loopback addresses allocated to a user. A first network identifier of the user or a first loopback address of the user is selected for a first program of the user and a second network identifier or a second loopback address is selected for a second program invoked by the user. Applicants submit that one of ordinary skill in the art would not combine Hipp and Willis, since a combination with Willis would render Hipp unsuitable for its intended purpose.

Hipp is geared towards electronic commerce processes in an electronic commerce marketplace which is "often flooded with high customer traffic" in which "insufficient computing resources are the cause of a processing bottleneck". (See Hipp, col. 1, lines 29-44). Furthermore, Hipp distinguishes itself from the prior art by stating that "previous attempts at providing computing resources have entailed leasing large blocks of storage and processing power" and that "this approach is inefficient." (Hipp, col. 1, lines 44-45). Hipp focuses on minimizing usage of shared resources while using a number of internet protocol addresses to identify each process from any other processes. Willis, on the other hand, uses a host address unique to a user session to identify a process associated with the user session. (Willis, par. [0017]). One of ordinary skill in the art knows that identifying each user session with each process requires a lot more additional internet protocol address and computing resources than identifying only each processes alone. Combining user session identification of Willis with process identification of Hipp in an environment which Hipp describes as "often flooded with high customer traffic" and with "insufficient computing resources" would provide a result counterproductive from the one Hipp declared it set out to accomplish. Therefore, one of ordinary skill in the art would not have the motivation to combine Willis with Hipp, since this combination would inevitably result in rendering Hipp unsuitable for its intended purpose.

In the Office Action, the Examiner states that Hipp does not teach the claim element involving the interface mechanism transmitting network identifiers with network communications. The Examiner cites Willis for the purpose of teaching this claim limitation. However, since Hipp and Willis cannot be combined to establish prima facie obviousness of the claimed invention, the Applicants submit that Hipp and Willis alone

do not teach each and every claim element. Thus the Applicants submit claims 1-8, 12-16, 17-29, 31-57 and 59-60 patentable and in condition for allowance. Applicants request the Examiner to reconsider and withdraw the rejections of claims 1-8, 12-16, 17-29, 31-57 and 59-60 under 35 U.S.C. §103.

B. Claims 9, 16, 17, 21, 30, 39 and 58 Patentable over Hipp, Willis, Yu and Eschbach

Claims 9, 30, 39 and 58 are rejected as unpatentable over Hipp and Willis and further in view of U.S. Patent No. 7,042,879 to Eschbach et. al. ("Eschbach"). Claims 16-17 and 21 are rejected as unpatentable over Hipp and Willis and further in view of Yu under 35 U.S.C. §103. Claims 9, 21, 30, 39 and 58 are rejected as unpatentable over Hipp and Willis and further in view of Eschbach ("Eschbach") under 35 U.S.C. §103. Claims 9, 16, 17 and 21 incorporates all of the claim elements of independent claim 1, as amended. Claim 30 incorporates all of the claim elements of independent claim 23, as amended. Claim 39 incorporates all of the claim elements of independent claim 31, as amended. Claim 58 incorporates all of the claim elements of independent claim 53, as amended.

As with Hipp and Willis, each of Yu and Eschbach fail to teach or suggest interface mechanism transmitting network identifiers with network communications. The Examiner cites Yu and Eschbach only to suggest features of dependent claims. Yu presents an example of a host operating system and a protocol operating system sharing a same TCP/IP protocol stack. (See Yu Abstract, col. 9, lines 24-29). Yu does not teach or suggest allocation of network identifiers to a user or allocation of loopback addresses to a user. Eschbach describes a mobility network wherein a computer obtains a network identifier from a network identifier generator. (See Eschbach Abstract, col. 13, lines 10-13). Eschbach does not teach or suggest allocation of network identifiers to a user or allocation of loopback addresses to a user. Thus, as with Hipp and Willis, Yu and Eschbach fail to teach or suggest each and every element of the claimed invention.

Because Hipp, Willis, Yu and Eschbach, alone or in combination, fail to teach or suggest each and every element of the claimed invention, Applicants submit dependent claims 9, 16, 17, 21, 30, 39 and 58 are patentable and in condition for allowance.

Applicants request the Examiner to reconsider and withdraw the rejection of claims 9, 16, 17, 21, 30, 39 and 58 under 35 U.S.C. §103.

CONCLUSION

In light of the aforementioned amendments and arguments, Applicants contend that each of the Examiners rejections has been adequately addressed and all of the pending claims are in condition for allowance. Accordingly, Applicants respectfully request reconsideration, withdrawal of all grounds of rejection, and allowance of all of the pending claims.

Should the Examiner feel that a telephone conference with Applicants' attorney would expedite prosecution of this application, the Examiner is urged to contact the Applicants' attorney at the telephone number identified below.

Respectfully submitted,

CHOATE, HALL & STEWART, LLP

Dated: April 11, 2008

Christopher J. McKerma Registration No. 53,302 Attorney for Applicants

Choate, Hall & Stewart, LLP Two International Place Boston, MA 02110 (617) 248-5000 APR. 11. 2008 5:24PM

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,583	09/27/2004	Michael BURR	2006579-0231 (CTX-093)	5582
69665	7590 01/11/2008	EXAMINER WATSON, CHARLES A		
CHOATE, HA	LL & STEWART / CITR JATIONAL PLACE			
BOSTON, MA			ART UNIT	PAPER NUMBER
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•			01/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Due 4/11/08
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3	Application No.	Applicant(s)							
	10/711,583	BURR ET AL							
Office Action Summary	Examiner	Art Unit							
	CHARLES A. WATSON	4117							
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A SHORTENED STATUTORY PERIOD FOR REPL	Y IS SET TO EXPIRE 3 MONTH	S) OR THIRTY (30) DAYS,							
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. Sec 37 CFR 1.704(b).									
Status									
1) Responsive to communication(s) filed on 29 s	September 2004.								
2a) This action is FINAL. 2b) ☑ This action is non-final.									
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is									
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.							
Disposition of Claims									
4)⊠ Claim(s) <u>1-60</u> is/are pending in the applicatio	n. '								
	awn from consideration.								
5) Claim(s) is/are allowed.									
6) Claim(s) 1-60 is/are rejected.	•	·							
7) Claim(s) is/are objected to	for election requirement								
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2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date									
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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1 8, 12- 16, 17 29, 31 57 and 59 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hipp et al. US 7,146, 431 (referred to as Hipp hereafter) in view of Willis (US 2005/0198387).

Regarding claim 1, Hipp teaches a system for assigning a unique network identifier to each program (e.g. application) invoked (e.g. launched) on a computer, in which an interface mechanism (200) selecting, from the plurality of network identifiers (e.g. addresses, column 3, lines 6-9, column 3, lines 60-column 4, line 6), a first network identifier for a first program invoked on the computer and selecting a second network identifier, different from the first network identifier, for a second program invoked on the computer (column 4, lines 6-10, chosen identifiers column 4, lines 45-54), and associating the first network identifier with the first program and associating the second network identifier with the second program and transmit one network identifier to a program and another network identifier to another program (column 7, lines 1-20). Hipp teaches that the network identifier is used in a network communication

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of the respective program, e.g. the program's IP address is the IP address the application uses for all communication (column 3, lines 2-3 for communicating over the network column 4, lines 20-29, 41-59)

However, Hipp does not teach where the interface mechanism in communication with the interface mechanism transmits the network identifier with a network communication of the respective program.

Willis teaches an interface mechanism (e.g. application program interface, 031-0032) for associating a network identifier with a with program (0026, 0039), wherein the network identifier is from a plurality of network identifier (0027);

interface mechanism transmits the network identifier with a network communication (e.g. packet) of (e.g. to/from) the respective program (0017) when intercepting all communication between to/from the program (0031-0032)...

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hipp and Willis. One of ordinary skill in the art would be motivated to combine these teachings with the teachings of Hipp because Hipp teaches a system which consist of a global address space identifying a plurality of network identifiers (internet protocol addresses) which is inherent in network communication that are reserved for use in one or more network environments, wherein each environment includes one or more plurality of IP addresses, which can be beneficial in Willis' system because Willis' system introduces a network communication interface which is capable of allocating addresses which will be unique to each user session, each session contains a plurality of processes which can represent an application program, where the

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computer system is connected to the network though an adapter, which can be is associated with a different user.

Regarding claim 2, Willis teaches a system wherein the network identifier comprises an internet protocol address (paragraph 0027).

Regarding claim 3, Willis teaches a system wherein the network identifier comprises a host name (paragraph 0026).

Regarding claim 4, Willis teaches a system wherein one of the first program and the second program comprises a user session hosted by the computer (paragraph 0027).

Regarding claim 5, Hipp teaches a system wherein one of the first program and the second program comprises one of an application isolation environment and an application (Abstract).

Regarding claim 6, Willis teaches a system wherein the computer obtains at least one of the plurality of network identifiers from a server (paragraph 0027).

Regarding claim 7, Willis teaches a system wherein the server comprises a Dynamic Host configuration Protocol server (paragraph 0027).

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Regarding claim 8, Willis teaches a system wherein the computer obtains at least one of the plurality of network identifiers from a storage location (paragraph 0027).

Regarding claim 10, Willis teaches a system wherein the interface mechanism (address allocator) selects the first network identifier for the first program during an establishment of the first program (paragraph 0039)

Regarding claim 11, Willis teaches a system wherein the interface mechanism (address allocator) selects the second network identifier for the second program during an establishment of the second program (paragraph 0039)

Regarding claim 12, Willis teaches a system wherein the computer concurrently hosts a first user session and a second user session (paragraph 0025 & Fig. 1).

Regarding claim 13, Willis teaches a system wherein the computer hosts a second user session subsequent to the hosting of a first user session (paragraph 0039 & Fig. 3).

Regarding claim 14, Willis teaches a system wherein the interface mechanism provides the first network identifier (200) of the first program in

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response to a name resolution request (204) of the first program and provides the second network identifier (200) of the second program in response to a name resolution request (204) of the second program (paragraph 0039 &Fig. 2 & 3).

Regarding claim 15, Willis teaches a system wherein at least one of the plurality of network identifiers is allocated to a user of the computer (paragraph 0039).

Regarding claim 18, Willis teaches a system wherein the socket library comprises a WinSock application programming interface (paragraph 0036).

Regarding claim 19, Willis teaches a system wherein the interface mechanism (address allocator) binds the first network identifier to the first program for socket communication with the network communication interface (paragraph 0044).

Regarding claim 20, Willis teaches a system wherein the interface mechanism (address allocator) binds the second network identifier to the second program for socket communication with the network communication interface (paragraph 0044).

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Regarding claim 22, Willis teaches a system wherein the interface mechanism (address allocator) comprises a network packet-manipulation filter (active filter) (paragraph 0037 & Fig. 3).

Regarding claim 31, the method claim comprises substantially the same step perform in the system claim 1, same rationale of rejection is applicable.

3. Claim 23 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willis.

Regarding claim 23, Willis teaches a system wherein assigning a unique loopback address (host address) to each program invoked on a computer, the system comprises a computer obtaining a plurality of loopback addresses (host addresses) (paragraph 0039, the computer comprising:

an interface mechanism selecting (address allocator), from the plurality of loopback address, a first address for a program invoked on the computer and selecting a second loopback address, different from the first loopback address, for a second program invoked on the computer, and associating the first loopback address as a local host address of the first program and associating the second loopback address as a local host address of the second (paragraph 0027); and

a loopback interface, in communication with the interface mechanism, transmitting the first loopback address with an inter-process communication of

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the first program, and transmitting the second loopback address with an interprocess communication of the second program (paragraph 0025 & 26).

Although Willis does use the term "program" he does teach that each session consists of a plurality of processes, and each of those processes does represent a application program, and in fig. 1, each computer system is capable of operating with multiple processes (0025-0026).

Willis also teaches where each process is capable of being assigned a unique host address, from a pool of addresses, with each request from each process (0027). It would have been obvious to one of ordinary skill in the art at the time the invention that the teachings of Willis performs all function as claimed, as such is functionally equivalent to the invention as claimed.

Regarding claim 53, this method claim comprises substantially the same step perform in the system claim 23, same rationale of rejection is applicable...

Regarding claims 24, 34, and 54, these method claim comprises substantially the same step perform in the system claim 4, same rationale of rejection is applicable.

Regarding claims **25, 35, and 55,** the method claim comprises substantially the same step perform in the system claim 5, same rationale of rejection is applicable..

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Regarding claims **26**, **40**, **and 59**, these method claims comprises substantially the same step perform in the system claim **10**, same rationale of rejection is applicable.

Regarding claims **27, 41**, and **60**, these method claims comprises substantially the same step perform in the system claim 11, same rationale of rejection is applicable.

Regarding claims 28 and 36, these method claims comprises substantially the same step perform in the system claim 6, same rationale of rejection is applicable.

Regarding claims 29, 38, and 57, these method claims comprises substantially the same step perform in the system claim 8, same rationale of rejection is applicable.

Regarding claims 32 and 33, these method claims comprises substantially the same step perform in the system claims 2-3, respectively, same rationale of rejection is applicable.

Regarding claims 37 and 56, these method claims comprises substantially the same step perform in the system claim 2, same rationale of rejection is applicable.

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Regarding claim 42-52 comprise substantially the same limitations as those discussed on claims 12-22, respectively; same rationale of rejection is applicable.

4. Claims **16, 17 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hipp and Willis, in view of Yu (US 5,734, 865).

Regarding claim **16**, Hipp and Willis do not teach a system wherein there interface mechanism comprises a first TCP.

Yu teaches a system wherein the interface mechanism comprises a first TCP stack (col. 9; line 24-29 & Fig. 1B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the references mentioned above. One of ordinary skill would be motivated to combine these teachings with the teachings of Yu because it would be beneficial to the user due to the properties of a TCP stack which are its ability to become pluggable components that may be implemented with the stack of the user's choice. Various combinations of stacks offer the optimal tradeoff between tiny size, intermediate size and performance, and very high performance when limited resources are available.

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Regarding claim 17, Yu teaches a system wherein the interface mechanism comprises a socket library for communication with the network communication interface (Fig. 1A).

Regarding claim 21, Hipp and Willis do not teach a system wherein there interface mechanism comprises a second TCP.

Yu teaches a system wherein the interface mechanism comprises a second TCP stack (Col. 9; line 24-29 & Fig. 1B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the references mentioned above. One of ordinary skill would be motivated to combine these teachings with the teachings of Yu because it would be beneficial to the user due to the properties of a TCP stack which are its ability to become pluggable components that may be implemented with the stack of the user's choice. Various combinations of stacks offer the optimal tradeoff between tiny size, intermediate size and performance, and very high performance when limited resources are available.

5. Claims 9, 30, 39, 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hipp in view of Willis, in further view of Eschbach et al (US 7,042, 879).

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Regarding **claim 9**, Hipp and Willis do not teach a system wherein there is a network identifier generator.

However, Eschbach teaches a system wherein the computer obtains at least one of the plurality of network identifiers from a network identifier generator (Col. 13; line 10-13 & Fig. 2A).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the references mentioned above. One of ordinary skill would be motivated to combine these teachings with the teachings of Eschbach because Eschbach teaches having a network system that includes an IP address generator. This IP address generator would extremely beneficial in Hipp and Willis invention because it would allow a user to be able to obtain network identifier for a particular session.

Regarding claims 30, 39, and 58, these method claims comprises substantially the same step perform in the system claim 9, same rationale of rejection is applicable.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Watson whose telephone number is (571) 270-3633. The examiner can normally be reached on Mon-Thurs 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beatriz Prieto can be reached on (571) 272-3902 or beatriz.prieto@uspto.gov. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C. Watson Patent Examiner

/Prieto, Beatriz/
Supervisory Patent Examiner, Art Unit 4117

U.6. Patent and Trademark Office PTO-892 (Rev. 01-2001)

				Application/Control No. 10/711,583 Examiner		Reexamination	Applicant(s)/Patent Under Reexamination BURR ET AL.		
		Notice of Reference				Art Unit	Page 1 of 1		
					CHARLES A. W	ATSON	4117	- Fage For I	
				U.S. PA	TENT DOCUMENT	18			
		Document Number Country Code-Number-Kind Code	Date MM-YYYY		Name			Classification	
	Α	US-5,734,865 A	03-1998	Yu, Kin	C.		709/250		
	В	US-2005/0198387 A1	09-2005	Willis, Michael John				709/245	
	O	US-7,042,879 B2	05-2006	Eschbach et al.				370/392	
	D	US-7,146,431 B2	.146,431 B2 12-2006 Hipp et al.					709/238	
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Notice of References Cited